

REMARKS

The application has been amended and is believed to be in condition for allowance.

Claims 1-16 were examined.

Claim Amendments and Formal Matters

Claims 1-16 have been replaced with new claims 17-36. The new claims have been drafted to overcome the pending 36 USC 112, first and second paragraph rejections. Withdrawal of those rejections is therefore solicited.

No new matter is entered by way of these amendments.

Rejections Under 35 USC 102, 103

Claims 1, 2, 6 and 7 were rejected as anticipated by ALTOFER 3,746,118.

Claims 1-16 were rejected as obvious over TRAUTWEIN 4,088,199 in view of TOWNSEND 4,351,410.

The newly presented claims are neither anticipated nor render obvious by the applied references as those references do not, alone or in fair combination, teach or suggest the recited features of the present invention. Accordingly, reconsideration and allowance of all the claims are respectfully requested.

New independent claim 17 now specifies that in addition to the footboards 14, 15, which are connected to the non-tilting frame part 2, a second pair of footrest members 12, 13 is connected to the tilting frame part 3, near the lower part of the

steering column 7, above the footboards 14, 15. The footboards 14, 15 function for the driver to push on with his legs to initiate or assist the tilting frame motions, or in case of coming to a stop, put his legs on in a similar manner as a motorcyclist puts his legs on the ground when coming to a stop.

As has been explained on specification page 2, line 20 onward, during driving the vehicle as a motorcycle, the bending and flexing of the legs of the driver by following the motions of the footboard, can be uncomfortable. By providing the footrest members 12, 13, it now becomes possible for the driver to put his feet down in several places. For instance, when traveling at ease along a straight road or a slightly winding road, the driver can place his feet on the two sides of the steering column of the tilting frame part 3, so that his whole body moves with the tilt. Only when the driver stops or is performing special curves, does he place his feet on the footboards 14, 15.

Nowhere does such a combination of footboards 14, 15 in combination with additional footrest members 12, 13 appear from ALTORFER. In ALTORFER, a three-wheeled motor scooter is described with an engine frame that is rigidly connected to a steering column. The lower end of the steering column is pivotally connected to the front axle assembly for pivoting about a banking axis. According to column 1, lines 44-55, the rider may initiate and control the banking action by turning a handle grip which actuates a switch for energizing a reversible linear actuator.

In contrast to such control of the banking via the handle grip 36 of ALTORFER (see also column 3, lines 6-17 of ALTORFER), the tilting of the vehicle of the present invention is controlled by the force the driver exerts on the non-tilting frame part, via the footboards 14, 15 or by the position of the driver with respect to the footboards. This means that in case the driver has placed his feet on the additional footrest members 12, 13 that are connected to the tilting frame part 3, the driver exerts no force on this frame part and the sensor does not actuate the tilting member 8. Hence normal, relaxed driving can occur.

In contrast to ALTORFER, the tilting action according to the invention is initiated and controlled via the legs of the driver, which results in much more natural and intuitive drive characteristics than controlling the tilting via a handle grip 36, which can easily result in too large a degree of tilt and hence in unsafe conditions.

In view of independent claim 18, it is specified that when turning a sharp bend, for instance a right hand bend, the driver will tend to push with his foot on the left footboard, such that the tilting member now assists the tilting action to the right hand side. Alternatively, this type of tilting control allows for exertion of a force opposite to an external force acting on the vehicle, such as a centrifugal force causing additional tilting towards the center of curvature of a bend, or

a wind force causing a counter tilting force of the tilting member 8.

In view of independent claim 22, the narrow edges 16, 17 on the footboards 14, 15 (see also page 4, lines 18-27) allow the driver to push hard against the footboards at any tilting angle, without the risk of slipping over the footboard. This anti-slip pushing edge is required by the present invention because tilting of the vehicle of the present invention is controlled, in contrast to the handle grip of the tilting vehicle of ALTORFER, by exertion of a force on the footboards. The edge on the footboard according to the invention allows for an accurate and direct control of the tilting vehicle.

In TRAUTWEIN, a tilting vehicle is shown comprising two footboards. In TOWNSEND, a tilting vehicle having three wheels is disclosed in which hydraulic cylinders are powered under control of a pivoting lever. Even if TRAUTWEIN were to be combined with TOWNSEND, no tilting control via the footboards, as described in new claim 17, is disclosed. It is unclear how the footboards of TRAUTWEIN should be combined with the pivoting lever of TOWNSEND to result in such a footboard-controlled tilting. The specific direction of tilting control according to independent claim 18 and the edge for supporting the foot of the driver upon tilting of independent claim 22 do not follow from combining TRAUTWEIN with TOWNSEND.

Thus, the newly presented claims are neither anticipated nor render obvious by ALTOFER, TRAUTWEIN, or TOWNSEND, alone or in fair combination. Therefore, reconsideration and allowance of all the claims are respectfully requested.

This response is believed to be fully responsive to the pending Official Action and is also believed to put the case in condition for allowance. An early and favorable action on the merits is earnestly requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

/Roland E. Long, Jr./
Roland E. Long, Jr., Reg. No. 41,949
209 Madison Street
Suite 500
Alexandria, VA 22314
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

REL/fb